CASE STUDY

Croydon University Hospital

Overview

Croydon University Hospital sits on a 19-acre site servicing half a million patients each year. 120,000 patients attend its A&E facility, and 27,000 planned in-patients per annum are catered for by 670 beds.

Why

The objective of the programme was to upgrade the standard of lighting across the estate, and to realise significant savings via a grant from NHS Energy Efficiency fund.

Why Energys

Energys conducted a site-wide survey to understand light levels, required controls, ceiling heights, access issues and the general working environment.

A Board-level audit was presented highlighting long-term energy savings and operational benefits that could be realised. A key outcome was the identification of performance issues of previously installed LED lighting, the quality of which had already started to diminish. This resulted in additional funds being allocated to the Trust to ensure the entire hospital could benefit from the full upgrade – all of which was awarded to Energys.

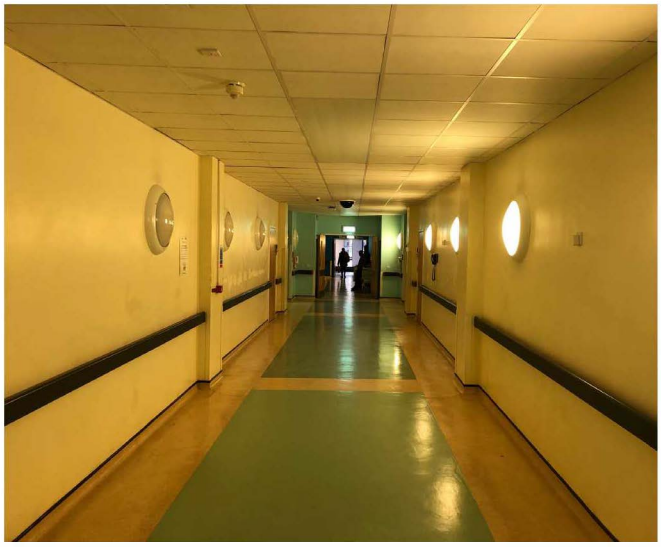
Challenges

This particular NHS Trust hospital has extremely high patient traffic and a large number of departments located within a compact site. A key feature of the project was the provision of detailed RAMS that had to take into consideration the requirements by department and the impact on patients and staff. Due to the exceptionally sensitive nature of the ward areas the RAMS were

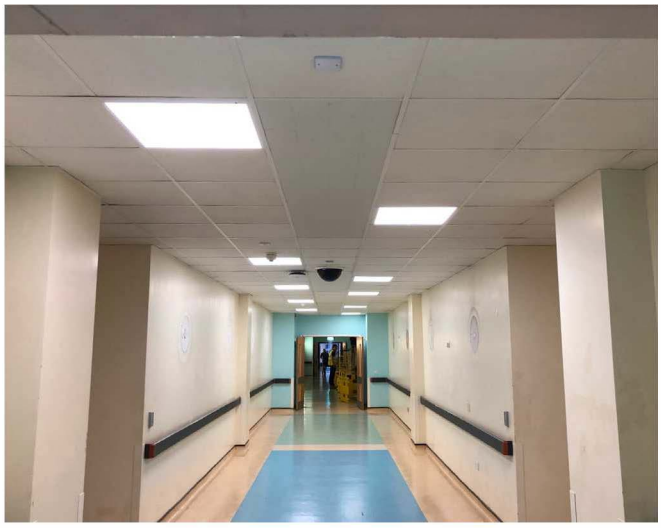


produced with input from our Projects team, the onsite facilities team and with input from Ward Charges Nursing staff to ensure patient and staff protection was optimised.

Mid-project the COVID-19 pandemic hit the country and Energys Group in conjunction with the hospital team had to swiftly develop a set of very specific working practices and a hygiene strategy that allowed the work to continue throughout the hospital. This, together with the excellent working rapport with the onsite facilities team ensured that the programme continued with no delays and was completed on time.



Before Energys LED upgrade



After Energys LED upgrade

Solution

A key outcome of the survey and technical review meetings was our recommendation of IntelliDim luminaries with built-in intelligent lighting sensors that control daylight harvesting and occupancy sensing to deliver optimised efficiency and constant light levels. Energys Group was able to demonstrate the full extent of energy savings deliverable through optimising lighting usage and eliminating manual input and maintenance, and this led to the project being extended to include replacement of all lighting including previously installed LEDs that were already deteriorating in performance.

Outcomes

Our successful tender response enabled NHS Trust to secure funding to complete the LED upgrade across the entire hospital campus.

Energys delivered – to time and budget – a site-wide LED upgrade programme across a fully operational NHS hospital, even under the most exceptional circumstances.

Energy savings equated to over £200k at the time of the installation, but having re-visited the financials using current energy unit prices the annual savings now exceed £400k, with projected savings for the lifetime of the equipment amounting to over £6 million, meaning the project will have paid for itself 8 times over.

Projected impact

Project Quantum	19-acre hospital site
Project Value	£713k
RoI	3.46 Years
Nmbr lights replaced	6,000
Annual Energy savings	£206k
Annual Energys savings	2.5 million kWh